



Waikato Journal of Education

ISSN 2382-0373
Website: <http://wje.org.nz>



Wilf Malcolm Institute
of Educational Research
Te Pūtahi Rangahau Mātauranga o Wilf Malcolm
THE UNIVERSITY OF WAIKATO

Title of Issue/section: Volume 22, Issue 4, 2017

Editor/s: Noeline Wright

To cite this article: Mohan, P. P., Lingam, G. S., & Chand, D. D. (2017). A comparative study of rural and urban teachers' perceptions of professional development. *Waikato Journal of Education*, 22(4), 79–87.
doi:[10.15663/wje.v22i4.352](https://doi.org/10.15663/wje.v22i4.352)

To link to this article: doi:[10.15663/wje.v22i4.352](https://doi.org/10.15663/wje.v22i4.352)

To link to this volume doi:[10.15663/wje.v22i4](https://doi.org/10.15663/wje.v22i4)

Copyright of articles

Creative commons license: <https://creativecommons.org/licenses/by-nc-sa/3.0/>

Authors retain copyright of their publications.

Author and users are free to:

- **Share**—copy and redistribute the material in any medium or format
- **Adapt**—remix, transform, and build upon the material
The licensor cannot revoke these freedoms as long as you follow the license terms.
- **Attribution**—You must give appropriate credit, provide a link to the license, and indicate if changes were made. You may do so in any reasonable manner, but not in any way that suggests the licensor endorses you or your use
- **NonCommercial**—You may not use the material for commercial purposes.
- **ShareAlike**—If you remix, transform, or build upon the material, you must distribute your contributions under the same license as the original.

Terms and conditions of use

For full terms and conditions of use: <http://wje.org.nz/index.php/WJE/about/editorialPolicies#openAccessPolicy>

and users are free to

- **Share**—copy and redistribute the material in any medium or format
- **Adapt**—remix, transform, and build upon the material
The licensor cannot revoke these freedoms as long as you follow the license terms.



A comparative study of rural and urban teachers' perceptions of professional development

Parmeshwar Prasad Mohan, Govinda Ishwar Lingam and Deepa Dewali Chand
University of the South Pacific

Abstract

This research examines rural and urban teachers' perceptions of Professional Development (PD) needs. Using a qualitative research design, data were gathered by means of document analysis and semi-structured interviews with 10 rural and 10 urban teachers. The major findings which emerged were, first, the PD needs of rural schools are slightly different from urban schools; secondly, all teachers need PD to sustain the changes made to their teaching practice regardless of their geographical locations; and finally, teachers' collaboration forms the basis of any PD. Overall, both the rural and urban teachers' perception was that effective PD enhances professional practice, which ultimately enhances student learning. This study, by providing information on the PD needs of the rural and urban teachers in Fiji, could be of interest to schools and the Ministry of Education (MoE).

Keywords

Professional Development (PD); Ministry of Education (MoE); rural; urban; perceptions; effectiveness

Introduction

Fiji is spread across 332 islands in the South Pacific Ocean and, according to the 2007 census, had a population of 837,271. Around half the population (412,425) are settled in rural areas (Fiji Bureau of Statistics, 2007). Even though the capacity and excellence of school resources are critical for schools to promote quality education, Fiji's geographical structure, limited size and the dispersed nature of the population hinder in the provision of educational facilities (Lingam & Lingam, 2013). Due to the islandness and the remoteness, the primary and secondary schools are not only on the main islands but also disseminated all over Fiji. Approximately 80 percent of primary schools and 52 percent of secondary schools are classified as rural and remote schools (Fiji Islands Education Commission, 2000). This study seeks to determine teachers' perceptions of Professional Development (PD) needs of rural and urban schools to help uplift the quality of students' learning and teaching in Fiji.

The education system in Fiji is continuously changing and expanding (Mohan, 2016). Teachers have a professional obligation to keep up-to-date with knowledge and skills in order to be effective (Guskey & Sparks, 1996). Hence teachers must have opportunities to continuously enhance their teaching skills



(Guskey & Huberman, 1995). Teachers should be engaged in peer coaching, lesson study, classroom observations and discussions (Mitchell & Sackney, 2009; Stoll, Bolam, McMahon, Wallace, & Thomas, 2006). Often the current physical and social environment of the schools restrict opportunities for teachers' continuous improvement (Lingam & Lingam, 2013).

To bring about ongoing improvement in teachers' knowledge and skills, it is important for teachers to undergo appropriate PD programmes to match the required standards (Mohan, 2016). Therefore an investigation of PD needs of rural and urban teachers' seemed necessary.

Background

Schools in Fiji practice traditional PD that includes staff meetings, workshops, seminars, conferences, symposia, in-house training, work attachments and long term in-service training (Tuimavana, 2010). Although teacher PD exists in various forms, its primary function is to improve teachers' knowledge and skills in order to help students learn better (Villegas-Reimers, 2003). However, even though PD is essential to improving the quality of education, rural teachers are more likely to miss out on in-service training because of their geographical locations (Lingam & Lingam, 2013; Williams, 2000). Therefore Darling-Hammond and McLaughlin (1995) and Mohan (2016) had argued that teachers' learning needs should be grounded in their day-to-day teaching practice with the intent of improving student learning.

Due to difference in resources like infrastructure, library facilities and ICT (Fiji Islands Education Commission, 2000), PD needs for rural teachers differ. Although various governments in Fiji have put in place policies to bridge the rural-urban gap, it is still noticed that a lot needs to be done (Lingam & Lingam, 2013). Chiu and Khoo (2005) affirmed that students with more resources have more learning opportunities. Thus, teachers' pedagogies differ in rural and urban schools due to quantity and quality of facilities in different geographical locations (Mohan, 2015; Muralidhar, 1989). However, Thakral (2011) shared sentiments stressing the nature of PD as a universal concept, and explained that despite geographical and cultural differences, some common features concerning the changing nature of teachers' professional learning are identifiable. Reflection and collaboration have been described as the core values of PD (Thakral, 2011). With the progression of time, teaching practices now need to be consistent and should reflect the increasingly globalised world people live in. Such globalised economies render the introduction of educational technology as attractive, even necessary, resulting in a less definitive concept of what constitutes knowledge (Hur & Brush, 2009; Trust, Krutka, & Carpenter, 2016). Thus, the concept of education itself, progressing from an isolated and structured concept to one that appears to be limitless and uncertain, emphasises the need for teachers to actively engage in effective PD (Knapp, 2003).

Effective PD has been defined as professional growth opportunities that impact teacher learning and eventually enhance student achievement (Desimone, 2009; Guskey, 2002; Sparks, 2004). Over the last two decades there have been numerous studies about aspects of effective PD (Garet, Porter, Desimone, Birman, & Yoon, 2001; Guskey, 2000). Rasmussen, Hopkins, and Fitzpatrick (2004) had suggested that effective PD was research based, coherent and capacity building. In addition, Desimone (2009) described the characteristics of effective PD as content focused, active learning, coherence, duration and collective participation.

According to Guskey (2000), effective PD has a positive impact on student learning. Teachers consider PD effective when it is connected to learning experience and their daily responsibilities (Flores, 2005; Mohan, 2015; Tate, 2009). This was affirmed by McLaughlin and Talbert (2006), who stated teachers learn best when they are involved in activities that focus on instruction and student learning in the workplace. Hord (2007) found that student data was a useful tool for PD identification. This was also asserted by Guskey (2002), who stated that the framework for effective PD must be based on the identified needs of the students. McLaughlin and Talbert (2006) stressed how effective PD involves the cycle of reflection, planning, learning and implementation. Through teacher

collaboration, teachers process and construct a theoretical understanding of their skills and knowledge through a continuous cycle of inquiry and improvement (Desimone, 2009). Hence effective PD is expanded and revolves around the issues that are relevant to the schools (Sparks, 2004). Teachers in rural schools face challenges in relation to cultural expectations of people in the community within which schools are located (Tuimavana, 2010); hence, teachers must be aware of the culture of the school. Effective student learning takes place often when teachers understand the cultural contexts of schools and students (Tuimavana, 2010). To help teachers understand the cultural contexts of their schools, upskilling them on such content is necessary (Mohan, 2015). But this may be a priority area for rural schools and not so much for urban schools.

According to Bray (1987), developing countries have incorporated models derived from developed countries. This was consistent with Singh (1986), who suggested that some of Fiji's problems are due to western oriented curriculum. The examination system puts an enormous pressure on rural schools to compete with well-equipped urban schools (Tuimavana, 2010). Today teachers are expected to maintain high academic standards, teach all types of students through a variety of teaching strategies, and are answerable to each student's academic progress (Barnard, 2004). Thus, teacher PD programmes need to be a major focus. For these reasons, the MoE in Fiji has made it mandatory for each teacher to undergo at least 20 hours of PD each year. To the author's knowledge, there is no prior research in a Fijian context that directly investigates teachers' perceptions on the PD needs of rural and urban schools, hence the present research project.

The study addresses a gap in research pertaining to teachers' perceptions regarding PD needs in rural and urban secondary schools. By investigating the current state of PD in schools and enquiring about teachers' perceptions of this, one can gain an understanding of the problems and recognise solutions to these problems. Thus, the purpose of the study was to answer the principal research question: What are teachers' perceptions of PD needs in Fijian rural and urban schools?

Research methodology

This study was deliberately designed to collect qualitative data, for qualitative analysis. Focusing on the phenomenological aspect of qualitative research allowed the study to incorporate teachers' perceptions, both emotional and intellectual, about PD needs of rural and urban teachers. For the purpose of this study, open-ended semi-structured interviews and document analysis were considered appropriate. These interviews were approximately 45 minutes in length and focused on five semi-structured open-ended interview questions. The researcher asked additional questions for clarity and accuracy of the responses. With permission from the participants, the interviews were recorded on a digital recorder to maintain accuracy. The transcribed data were subjected to qualitative analysis through the process of coding, which allowed categories and themes to be derived from the actual data. According to McMillan (2004), triangulation is necessary in qualitative research as it enhances the credibility of the data. Thus, as well as interviews, documents associated with school PD were also examined.

This study involved the population of teachers from the two case study schools (one rural and one urban secondary school) in Fiji in 2014.

The demographic information of the participants are summarised in Table 1.

Table 1. Summary of Research Participants

Research Participant No.	Teacher code used for this research	Gender	Experience (Years)	Highest qualification
<i>Urban Case Study School</i>				
1	T 1U	Female	10	Degree
2	T 2U	Male	19	Degree
3	T 3U	Female	6	Degree
4	T 4U	Female	11	Diploma
5	T 5U	Female	9	Degree
6	T 6U	Female	17	Degree
7	T 7U	Male	10	Degree
8	T 8U	Female	3	Degree
9	T 9U	Female	9	Degree
10	T 10U	Male	16	Diploma
<i>Rural Case Study School</i>				
1	T 1R	Female	2	Degree
2	T 2R	Female	9	Diploma
3	T 3R	Male	1	Diploma
4	T 4R	Female	5	Post graduate Certificate
5	T 5R	Male	11	Diploma
6	T 6R	Female	1	Degree
7	T 7R	Male	9	Diploma
8	T 8R	Male	3	Degree
9	T 9R	Male	7	Degree
10	T 10R	Female	4	Diploma

Findings

The main data collection tool was the interview. Twenty teachers were interviewed from the two case study schools, 10 from the rural and 10 from the urban schools. The interviews from the two schools are analysed in Table 2 under the identified themes. Some typical responses of the participants are also included under the identified themes from the two case study schools.

Table 2. Identified Themes with Quotes

Themes	Examples of quotes from rural teachers	Examples of quotes from urban teachers
What makes PD effective?	For me an effective PD is one that gives me new knowledge. Our students in rural are a bit disadvantaged in terms of resources so we want PD, which makes us better teachers so that we can enhance students' understanding. (T9R, 2014)	An effective PD is when we get hands-on experience. Through active learning, we are able to learn better. Another interesting thing I found is that PD which is interactive is interesting and also we are able to learn from each other. (T8U, 2014)
Impact of PD on student learning	PD sessions teach us that there are better ways to teach. We learn new strategies. This has an impact on the students. Students are more motivated to learn. We can say that students enjoy learning. (T8R, 2014)	It has impacted my students' learning. For me, we have different levels of students in the class. It's easy for me to handle the students after learning new skills and doing group work, helps them to learn more. All these help me be a better teacher. (T6U, 2014)
PD needs	We need PD based on students' needs. Our students need extra support due to lack of resources. (T4R, 2014)	I personally feel that we should have more PD on how to tackle in-discipline of students. (T2U, 2014)
Factors that affect the effectiveness of PD	Like for our school, we have PD every Wednesday. But if the PD sessions are need based then it will be good. (T7R, 2014)	First of all, we are taking PD in the morning sessions, during recess and during our staff briefing. One thing I must say, it is affecting our class time because sometimes we are late to go in to the class. (T6U, 2014)
Challenges of PD	We lack resources, example multimedia. Showing actual videos will help us learn better. (TR5, 2014)	Finding the right time to have PD is a challenge. We all have heavy workload. (T5U, 2014)

Table 3. Themes with Summary of Comments

Theme	Summary of comments	
	Rural Case Study School	Urban Case Study School
What makes PD effective?	When it contributes towards improving student learning.	PD that is interactive and involves active learning.
Impact of PD on student learning	Teachers' increasing knowledge and skills contribute towards better student learning.	Builds knowledge and skills to guide students better.
PD needs	PD on: <ul style="list-style-type: none"> • teachings strategies • managing with limited resources • school culture • community partnership 	PD on: <ul style="list-style-type: none"> • behaviour management • extra-curricular activities • developing child holistically • community partnership
Factors that affect the effectiveness of PD	<ul style="list-style-type: none"> • content • timing • selection of PD • poor planning • resources 	<ul style="list-style-type: none"> • content • timing • presenter • no interaction
Challenges for PD provision	<ul style="list-style-type: none"> • lack of resources • workload • difficult to bring in experts for PD due to distance 	<ul style="list-style-type: none"> • difficulty in finding external facilitators • timing of PD • workload • school culture

Discussion

The education system in the past focused on basic education, but the twenty-first century education system demands quality and holistic education; thus, quality teachers are needed (Fullan, 2007). Regardless of place and time, educational service delivery depends on the quality of teachers. As recognised by Smith and Gillespie (2007), the productivity of teachers comes from not only pre-service training but also continuous PD activities.

The findings showed that both rural and urban teachers felt that the changing education system demands the need for teacher PD (Guskey, 2000). According to Table 3, some differences were found between the responses of the rural and urban case study schools in regard to the identified themes. For the first theme, what makes PD effective, it was evident that rural school teachers were more interested in innovative teaching strategies which could help them to improve students' learning and teaching. On the other hand, urban teachers were more interested in teacher collaboration and active learning. Even though education experts acknowledge that teacher collaborative learning was an effective approach to improve practice in work (McLaughlan & Talbert 2006; Lieberman & Mace, 2008), the findings showed that there was a lack of active participation of teachers in the PD programmes. It was noted that the majority of the time teachers attended traditional PD programmes as audience only which was consistent with the findings of Lord, Cress & Miller (2008). In addition, the findings showed that more of the rural and less of urban schools still practised the traditional approach to conducting PD programmes, something that is consistent with the literature (Darling-Hammond, 1996; Lord et. al., 2008).

For the second theme, the impact of PD on students' learning, it was evident from the comments that both rural and urban teachers found positive impact on students' learning. As teachers developed their knowledge and skills through participation in PD programmes, they become more confident with their own practice, again consistent with findings of Harris, Cale, and Mussson (2011). The findings further revealed teachers wanted more teacher collaboration to enhance student learning. This was consistent with the findings of DuFour, DuFour, Eaker, and Many (2010), McLaughlin and Talbert (2001), and Stoll et al. (2006).

The third theme, which was the teachers' PD needs, found the rural teachers were more in need of PD relating to student learning and teaching, community partnership, school culture and how to manage with minimum teaching resources. In contrast, urban teachers needed PD on student behaviour management and extra-curricular activities for holistic development of students. The findings highlighted that the teachers perceived that PD for the teachers, which are based on students and school-specific needs, was more effective in changing teaching practice than standardised or pre-planned PD without consultation. This was consistent with Guskey (2002) and Mohan (2016) who affirmed that PD should be based on meeting student needs.

For the fourth theme, the factors that affect the effectiveness of PD, rural teachers and urban teachers both had alleged that the content, timing, planning, presenter, active participation and collaboration are the factors to consider for an effective PD session. The literature demonstrates that there are several features of a quality PD programme that when present lead to success stories (Fullan & Stiegelbauer, 1991). For rural teachers, resources were an additional factor which affected PD. This was supported by Villegas-Reimers (2003), who stated that the major factor for rural school-based PDs was generally that of resources.

For the rural case study school, the PD, which basically focused on learning and teaching were mostly conducted by senior teachers of the school. This meant that the novice teachers were heavily dependent on the experienced teachers to gain new knowledge and skills. The urban case study school, though, had other sources available apart from experienced teachers to facilitate PD. The external PD, as the teachers of the urban case study school see it, enables them to develop a child holistically. The urban case study teachers also mentioned their good fortune in having the right environment and facilities for successful PD. This was echoed by Guskey and Sparks (1996) and Thakral (2011), who

asserted that in the creation of an environment that promotes and motivates teachers' active participation in the PD activities, modern technological resources play a crucial role as they save time and make presentations lively.

Looking at the factors that affect PD effectiveness produced the observation that the majority of the participants of the rural and urban case study schools mentioned the importance of the timing of the sessions. To undergo PD in school during official hours becomes very difficult for the teachers because it affects teaching time. Therefore PD conducted during school hours were said to be ineffective because of time limitations. Teachers commented that a PD session had to be of very short duration, otherwise it went beyond the time limit and it affected teaching time. The MoE recommends that PD in school must be held after school hours and must last for an hour or more in order to be accumulated and registered (Ministry of Education, 2014). This is supported by Timperley, Wilson, Barrar, and Fung's (2007) conclusion that teachers need to participate in longer PD sessions to sustain more complex change to their practice.

Conclusion

This study has established that the rural and urban teachers' PD needs are slightly different. The major contributing factors to the difference are the school resources and most importantly the student needs. In Fiji, due to the geographical locations of schools, rural schools are vulnerable to lack of resources. Availability of resources for learning and teaching is recognised as vital in providing more and better learning opportunities to children (Lingam & Lingam, 2013). Without suitable resources, it is difficult for teachers to implement the curriculum effectively to improve students' learning and teaching. Therefore appropriate PD is necessary to apprehend the challenge. New practices can be reinforced through professional learning communities where the teachers could be encouraged to share their knowledge and experiences with each other and to support their professional learning experience (Aminudin, 2012; Jay & Johnson, 2002). This affirms that PD for teachers needs to address their specific needs so that the experience becomes more meaningful and not viewed as a burden.

The urban schools have mostly adequate resources for students' self-learning, extra tuition and excess to internet. Therefore students' needs are different. Urban students need extra-curricular activities to prepare them holistically for the future. Due to such exposure, the study shows that urban students have discipline issues. Therefore the PD for urban teachers needs to focus on such topics.

The study has established that PD needs are slightly different for rural and urban schools. Appropriate PD increases teachers' knowledge and skills but has acknowledged that there are some challenges associated with PD. Some of the major challenges identified by the teachers were difficulty in finding appropriate time for PD, trying to find experts for PD facilitation, lack of resources, lack of planning, workload and school culture.

References

- Aminudin, N. A. (2012). *Teachers' perceptions of the impact of professional development on teaching practice: The case of one primary school* (Master's thesis, Unitec Institute of Technology, Auckland, New Zealand). Retrieved from <http://unitec.researchbank.ac.nz/handle/10652/2013>
- Barnard, R. (2004). *A qualitative study of teachers' perceptions of staff development*. East Tennessee, TN: State University.
- Bray, M. (1987). *Are small schools the answer? Cost-effective strategies for rural school provision*. London, England: University of Hong Kong, Commonwealth Secretariat. <https://doi.org/10.14217/9781848594197-en>
- Chiu, M. M., & Khoo, L. (2005). Effects of resources, inequality, and privilege bias on achievement: Country, school, and student level analysis. *American Educational Research Journal*, 42(4), 575–603. <https://doi.org/10.3102/00028312042004575>

- Darling-Hammond, L. (1996). National standards and assessments: Will they improve education? *American Journal of Education*, 102, 478–510.
- Darling-Hammond, L., & McLaughlin, M. W. (1995). Policies that support professional development in an era of reform. *Phi Delta Kappan*, 76(8), 597.
- Desimone, L. M. (2009). Improving impact studies of teachers' professional development: Towards better conceptualization and measures. *Educational Researcher*, 38(3), 181–199. <https://doi.org/10.3102/0013189X08331140>
- DuFour, R., DuFour, R., Eaker, R., & Many, T. (2010). *Learning by doing: A handbook for professional communities at work*. Bloomington, IN: Solution Tree.
- Fiji Bureau of Statistics. (2007). *Fiji census of population and housing: General tables*. Suva, Fiji: Bureau of Statistics.
- Fiji Islands Education Commission. (2000). *Learning together: Directions for education in the Fiji Islands*. Report of the Fiji Islands Education Commission/Panel. Suva: Government Printer, for the Commission.
- Flores, M. A. (2005). How do teachers learn in the workplace? Findings from an empirical study carried out in Portugal. *Journal of In-service Education*, 31(3), 485–508. <https://doi.org/10.1080/13674580500200491>
- Fullan, M. (2007). *The new meaning of educational change* (4th ed.). New York City, NY: Teachers College, Columbia University.
- Fullan, M., & Stiegelbauer, S. (1991). *The new meaning of educational change*. New York, NY: Teachers College Press.
- Garet, M. S., Porter, A. C., Desimone, L., Birman, B., & Yoon, K. S. (2001). What makes professional development effective? Results from a national sample of teachers. *American Educational Research Journal*, 38, 915–945. <https://doi.org/10.3102/00028312038004915>
- Guskey, T. R. (2000). Research needs to link professional development and student learning. *Journal of Staff Development*, 18(2), 36–40.
- Guskey, T. R. (2002). Does it make a difference? *Educational Leadership*, 59(6), 45–51.
- Guskey, T. R., & Sparks, D. (1996). Exploring the relationship between staff development and improvements in student learning. *Journal of Staff Development*, 17(4), 34–38.
- Guskey, T., & Huberman, M. (1995). *Professional development in education*. New York, NY: Teachers College Press.
- Harris, J., Cale, L., & Musson, H. (2011). The effects of a professional development programme on primary school teachers' perceptions of physical education. *Professional Development in Education*, 37(2), 291–305. <https://doi.org/10.1080/19415257.2010.531973>
- Hord, S. (2007, March). *Professional learning communities*. Poster session presented at the Southwest Regional Educational Service Alliance Conference, University of North Carolina, Charlotte, NC.
- Hur, J. W., & Brush, T. A. (2009). Teacher participation in online communities: Why do teachers want to participate in self-generated online communities of K–12 teachers? *Journal of Research on Technology in Education*, 41(3), 279–303. <https://doi.org/10.1080/15391523.2009.10782532>
- Jay, J. K., & Johnson, K. L. (2002). Capturing complexity: A typology of reflective practice for teacher education. *Teaching and Teacher Education*, 18(1), 73–85. [https://doi.org/10.1016/S0742-051X\(01\)00051-8](https://doi.org/10.1016/S0742-051X(01)00051-8)
- Knapp, M. (2003). Professional development as a policy pathway. *Review of Research in Education*, 27, 109–157. <https://doi.org/10.3102/0091732X027001109>
- Lieberman, A., & Mace, D. H. P. (2008). Teacher learning: The key to educational reform. *Journal of Teacher Education*, 59(3), 226–234. <https://doi.org/10.1177/0022487108317020>
- Lingam, G. I., & Lingam N. (2013). Making learning and teaching a richer experience: A challenge for rural Fijian primary schools. *Academic Journals*, 8(21), 2160–2168.
- Lord, B., Cress, K., & Miller, B. (2008). Teacher leadership in support of large-scale mathematics and science education reform. In M. M. Mangin & S. R. Stoelinga (Eds.), *Effective teacher*

- leadership: Using research to inform and reform* (pp. 10–35). New York, NY: Teachers College Press.
- McLaughlin, M., & Talbert, J. (2006). *Building school based teacher learning communities*. New York, NY: Teachers College Press.
- McMillan, H. J. (2004). *Educational research: Fundamentals for the consumer*. Boston, MA: Pearson Education.
- Mitchell, C., & Sackney, L. (2009). *Sustainable improvement. Building learning communities that endure*. Rotterdam, The Netherlands: Sense.
- Ministry of Education. (2014). *Professional development policy*. Suva, Fiji: Government Printery.
- Mohan, P. P. (2015). *Teachers' perceptions of professional development at two Fijian secondary school*. (Master's thesis, University of the South Pacific, Suva, Fiji). Retrieved from <http://digilib.library.usp.ac.fj/gsdli/collect/usplibr1/index/assoc/HASH2448.dir/doc.pdf>
- Mohan, P. P. (2016). A study on novice and experienced teacher perceptions of professional development in Fiji. *Waikato Journal of Education*, 21(1), 167–174. <https://doi.org/10.15663/wje.v21i1.265>
- Muralidar, S. (1989). *An exploratory study of a science curriculum in action: Basic science in Fiji*. (Unpublished doctoral thesis). Monash University, Australia.
- Rasmussen, C., Hopkins, S., & Fitzpatrick, M. (2004). Our work done well is like the perfect pitch. *Journal of National Staff Development Council*, 25(1), 16–25.
- Singh, G. (1986). What's worth small rural schools? *Directions, Journal of Educational Studies*, 8(1), 16.
- Smith, C., & Gillespie, M. (2007). *Research on professional development and teacher change: Implications for adult basic education*. Retrieved from <http://www.ed.gov/teachers/how/tools/initiative/factsheet.pdf>
- Sparks, D. (2004). A paradigm shift in staff development. *Journal of Staff Development*, 15(4), 26–29.
- Stoll, L., Bolam, R., McMahon, A., Wallace, M., & Thomas, S. (2006). Professional learning communities: A review of the literature. *Journal of Educational Change*, 7(4), 221–258. <https://doi.org/10.1007/s10833-006-0001-8>
- Tate, M. L. (2009). Workshops: Extend learning beyond your presentation with these brain-friendly strategies. *Journal of Staff Development*, 30(1), 44–46.
- Thakral, V. (2011). *Effectiveness of professional development at a primary school in Hong Kong* (Master's thesis, University of Hong Kong, Hong Kong). Retrieved from <http://hub.hku.hk/bitstream/10722/177266/1/FullText.pdf?accept=1>
- Timperley, H., Wilson, A., Barrar, H., & Fung, I. (2007). *Teacher professional learning and development: Best evidence synthesis iteration (BES)*. Wellington, New Zealand: Ministry of Education.
- Trust, T., Krutka, D. G., & Carpenter, J. P. (2016). “Together we are better”: Professional learning networks for teachers. *Computers and Education*, 102, 15–34. <https://doi.org/10.1016/j.compedu.2016.06.007>
- Tuimavana, R. W. R. (2010). *Developing and retaining quality teachers in rural Fiji primary schools* (Unpublished master's thesis). University of the South Pacific, Suva, Fiji.
- Villegas-Reimers, E. (2003). *Teacher professional development: An international review of literature*. Paris, France: International Institute for Educational Planning.
- Williams, E. B. (2000). *Facing the challenges of Fijian education: Planning for the future, learning together: Directions for Education in the Fiji islands, Report of the Fiji islands education commission*. Suva, Fiji: Government Printer.